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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/558,755	04/21/2000	Devin F. Hosea	109.635.123	9034

7590 11/12/2003  
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EXAMINER

BOYCE, ANDRE D

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 11/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/558,755

Applicant(s)

HOSEA ET AL.

Examiner

Andre Boyce

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-63 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. This Final office action is in response to Applicant's amendment filed August 25, 2003. Claims 1, 22, 31, 32, 53, and 56 have been amended. Claims 1-63 are pending.
2. The previously pending rejections under 35 USC § 101 have been withdrawn.
3. Applicant's arguments with respect to claims 1-63 have been considered but are moot in view of the new ground(s) of rejection, based upon Applicant's amendments to the claims.
4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 103***

5. Claims 1, 2, 7-9, 11-14, 20, 22-24, 26-57, and 62-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (USPN 6,285,987) in view of Bull et al (USPN 6,208,975).

As per claim 1, Roth et al disclose a method of profiling a Web user (via view-opportunity/view-op, see column 2, lines 11-14), comprising: providing profiles on a plurality of Web sites (web site demographics, see column 9, lines 13-14 and column

18, lines 51-53); using a computer to monitor which of said plurality of Web sites the user accesses (see column 2, lines 14-19) and using a computer to develop a profile of the user based on the profiles of the Web sites accessed by the user (updates information via view-op, see column 4, lines 26-31). Roth et al does not explicitly disclose using a computer to develop a profile of the user by inferring user demographics based on the profiles of the Web sites. Bull et al discloses the user's web viewing patterns monitored and matched against software text agents to match a profile (see column 15, lines 14-19), including user demographics. Both Roth and Bull are concerned with effectively profiling users, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include inferring user demographics based on web sites visited in Roth, as seen in Bull, thereby increasing the flexibility and robustness of the Roth system in determining the profiles of its users.

As per claim 2, Roth et al disclose demographic data (see column 2, lines 14-19).

As per claims 7-8, Roth et al disclose psychographic data including data on the user's interests (viewer history data, see column 8, lines 65-67).

As per claim 9, Roth et al disclose providing a database associating each of said plurality of Web sites with demographic characteristics of known persons who have accessed said sites (database 16D, see column 18, lines 51-53).

As per claims 11-12, Roth et al disclose identifying URL requests made by the user while Web surfing and identified at an Internet Service Provider (ISP) point of presence (see column 8, lines 20-26 and figure 4, table 408).

As per claim 13, Roth et al disclose URL requests associated with a user and stored in a database (see column 4, lines 26-31).

As per claim 14, Roth et al disclose updating an existing user profile (see column 4, lines 30-31).

As per claim 20, Roth et al disclose delivering selective advertising to said user based on his or her profile (see column 4, lines 58-61).

Claims 22, 24, 26-29 are rejected based upon the rejection of claims 1, 9, 13, 19-21, respectively, since they are the computer claims corresponding to the method claims. Further, see column 6, lines 53-56.

As per claim 23, Roth et al disclose the computer comprising an ISP point of presence server (ISP 712 connected to servers 716, see Figure 7).

As per claim 30, Roth et al disclose the computer cooperates with a computer operated by the user to display an advertisement on a display of the computer operated by the user, said advertisement being selected from a plurality of advertisements based on the profile of the user (see column 4, lines 58-61).

As per claim 31, Roth et al disclose a system for profiling a Web user and delivering selective advertising to the user, comprising: a database containing profile data on a plurality of Web sites (web site 14, see Figure 1); means for monitoring which of said plurality of Web sites the user accesses; means for developing a profile of the user using profile data of the Web sites accessed by the user (see column 4, lines 44-49); means for matching the user with an advertisement based on the developed user profile; and means for delivering said advertisement to the user

(see column 4, lines 58-61). Roth et al does not explicitly disclose using a computer to develop a profile of the user by inferring user demographics based on the profiles of the Web sites. Bull et al discloses the user's web viewing patterns monitored and matched against software text agents to match a profile (see column 15, lines 14-19), including user demographics. Both Roth and Bull are concerned with effectively profiling users, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include inferring user demographics based on web sites visited in Roth, as seen in Bull, thereby increasing the flexibility and robustness of the Roth system in determining the profiles of its users.

As per claim 32, Roth et al disclose a system for inferring a profile of a person using a client computer for Web surfing, and delivering selective advertising to the person based on his or her profile (see Figure 7), comprising: a local server computer linked to said client computer for providing Internet access (client browser 711), said local computer including means for monitoring which of said plurality of Web sites the person accesses, means for developing a profile of the person based on predetermined profile data of the Web sites accessed by the person, and means for delivering an advertisement to the client computer (server 716); and a remote server computer linked to said local server computer and including means for matching an advertisement received from an advertiser to said person based on his or her profile, and means for transmitting said advertisement to said local server computer for eventual transfer to the client computer (server 730). Roth et al does not explicitly disclose using a computer to develop a profile of the user by inferring

user demographics based on the profiles of the Web sites. Bull et al discloses the user's web viewing patterns monitored and matched against software text agents to match a profile (see column 15, lines 14-19), including user demographics. Both Roth and Bull are concerned with effectively profiling users, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include inferring user demographics based on web sites visited in Roth, as seen in Bull, thereby increasing the flexibility and robustness of the Roth system in determining the profiles of its users.

As per claim 33, Roth et al disclose a local database containing data associating a plurality of Web sites with predetermined profile data on said sites (database 16B, see Figure 1).

As per claim 34, Roth et al disclose a master database containing data associating a plurality of Web sites with predetermined profile data on said sites, and wherein data in said master database is periodically synchronized with said local database. Database 16B (Figure 1) is the master and local database and synchronization is inherent.

As per claim 35, Roth et al disclose the local server computer and the remote server computer linked by an Internet connection (inter-computer network, see column 6, lines 56-58).

As per claim 36, Roth et al disclose means for delivering URL string pointing to the advertisement (see column 12, line 53).

Claims 37-50 are rejected based on the rejections of claims 2-8, 11-12, and 15-19, respectively as being the system claims corresponding to the method claims.

As per claim 51, Roth et al disclose means for monitoring how long the advertisement is displayed to the user (view-time, see column 8, lines 61-62).

As per claim 52, Roth et al disclose means for monitoring whether the user has clicked-through the advertisement (see column 8, lines 1-2).

Claim 53 is rejected based upon the rejection of claim 1, since it is the computer readable medium claim corresponding to the method claim.

As per claims 54-55, Roth et al disclose the medium comprises a removable memory (see column 9, lines 19-21), and a signal transmission (see column 10, lines 34-36).

As per claim 56, Roth et al disclose computerized method of profiling Web users and selectively delivering content to said users, comprising: providing profiles of a plurality of Web sites (web site demographics, see column 9, lines 13-14 and column 18, lines 51-53), said profiles including demographic data of persons known to have visited said sites (see column 9, lines 1-14); electronically monitoring which of said plurality of Web sites each of said users visits; developing a profile of each user based on the profiles of the Web sites visited by the user (see column 4, lines 44-49); identifying a target group of said users who would be receptive to receiving certain content based on their profiles; and selectively delivering the content to users of that target group (see column 13, lines 53-56). Roth et al does not explicitly disclose using a computer to develop a profile of the user by inferring user



demographics based on the profiles of the Web sites. Bull et al discloses the user's web viewing patterns monitored and matched against software text agents to match a profile (see column 15, lines 14-19), including user demographics. Both Roth and Bull are concerned with effectively profiling users, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include inferring user demographics based on web sites visited in Roth, as seen in Bull, thereby increasing the flexibility and robustness of the Roth system in determining the profiles of its users.

As per claim 57, Roth et al disclose the content comprises advertisements (see column 4, lines 58-61)

As per claim 62, Roth et al does not explicitly disclose adjusting the target group to optimize user responsiveness to the content (see column 13, lines 53-64). By adjusting the criteria in Roth et al, the target group is adjusted accordingly.

As per claim 63, Roth et al disclose an advertisement, and determining user responsiveness to the content comprises determining how many users have clicked-through the advertisement (see column 2, lines 41-46).

6. Claims 3-6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (USPN 6,285,987).

As per claims 3-6, Roth does not explicitly disclose including the user's age, gender, income, and highest attained education level. However, Roth discloses Web site demographics data (see column 9, lines 13-14), and it is old and well

known that age, gender, income, and highest attained education level are demographic attributes, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include those attributes as part of the demographic information collected in Roth et al, thereby collecting more information on the customer, thus determining a more accurate profile.

As per claim 10, Roth et al does not disclose said database provided by a Web site ratings service. However, Roth et al disclose Web site demographic data collected from commercial sources (see column 18, lines 51-53), therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a database provided by a Web site rating service in Roth et al, thereby providing a profile of the Website and more accurately determining the consumer profile.

7. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (USPN 6,285,987), in view of Sheena et al (USPN 6,049,777).

As per claims 15 and 18, Roth et al does not disclose combining the profiles of the Web sites accessed by the user to the existing user profile using an averaging algorithm and the average rating is determined using a clustering algorithm. Sheena et al disclose using an averaging algorithm to calculate a similarity factor between a pair of users (see column 8, lines 47-49), based on their ratings of a product. Sheena et al also disclose clustering algorithms (see column 22, lines 33-36) used to calculate the mean of the rating given to each item a user has rated. Sheena et al

also disclose the method working equally as well for items having many features of interest (see column 19, lines 9-13), such as web site and user profiles. Further, both Roth et al and Sheena et al are concerned with user profiles, and product recommendation, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include using an averaging algorithm to combine the profiles of the web site and user and determining the average rating using a clustering algorithm in Roth et al, thereby improving the profile of the user, thus providing more targeted advertisement.

As per claims 16-17, Roth et al does not disclose user profile includes data on a plurality of demographic categories, each associated with a rating, and the method further comprises filling in a value for the rating for any demographic category having a low confidence measure and using an average rating of persons having similar profiles to that of said user for a category having a low confidence measure.

Sheena et al disclose using an averaging algorithm to calculate a similarity factor between a pair of users (see column 8, lines 47-49), based on their ratings of a product. Further, Sheena et al disclose items with low confidence factors (see column 10, line 10), and correlation between neighboring users (see column 10, lines 20-23). Both Roth et al and Sheena et al are concerned with user profiles, and product recommendation, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include filling in a value for the rating for any demographic category having a low confidence measure and using an average rating of persons having similar profiles to that of said user for a

category having a low confidence measure, in Roth et al, thereby being able to fill in incomplete user profiles, thus making the method more robust.

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (USPN 6,285,987), in view of Eldering (USPN 6,298,348).

As per claim 19, Roth et al does not explicitly disclose erasing records of which Web sites said user has visited after developing the user's profile to protect user privacy. Eldering discloses maintaining consumer privacy via private data networks (see column 4, lines 62-65). Both Roth and Eldering are concerned with consumer demographic information collection, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include maintaining consumer privacy in Roth et al, as seen in Eldering, via deletion of records, thus securing consumer privacy making the system more effective.

9. Claims 21 and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (USPN 6,285,987), in view of Park et al (USPN 6,295,061).

As per claims 21 and 58-59, Roth et al does not explicitly disclose transmitting pop-up and banner advertisements to a display of a computer operated by the user. Park et al disclose banner advertisement (see column 1, lines 30-33), and pop-up advertisement over the internet (see column 2, lines 1-2). Both Roth et al and Park et al are concerned with effective advertising via the internet, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was

made to include pop-up and banner advertisement in Roth et al, as a means of reaching the consumer to provide information on a product.

As per claim 60, Roth et al disclose means for monitoring how long the advertisement is displayed to the user (view-time, see column 8, lines 61-62).

As per claim 61, Roth et al disclose means for monitoring whether the user has clicked-through the advertisement (see column 8, lines 1-2).

10. Claim 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (USPN 6,285,987), in view of Haitsuka et al (USPN 6,366,298).

As per claim 25, Roth et al does not disclose the program including a sniffer identifying URL requests made by the user while Web surfing. Haitsuka et al discloses a client monitoring device that grabs URL's from communication stream between the browser and web server (i.e., sniffer, see column 8, lines 56-60). Both Roth and Haitsuka are concerned with the effective monitoring of on-line viewers, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a sniffer in Roth, as seen in Haitsuka, as an effective method of obtaining the viewers URL requests, thus making the Roth system more efficient.

### ***Response to Arguments***

11. In the Remarks, with respect to claim 1, Applicant argues that Roth does not disclose or suggest developing a profile by inferring demographics of the user based on the profiles of the web sites accessed by the user. The Examiner discloses that

Bull et al discloses the user's web viewing patterns monitored and matched against software text agents to match a profile (see column 15, lines 14-19), including user demographics. Further, although Bull et al also discloses the user able to explicitly enter profile information, the information may *alternatively* be collected implicitly, via analysis of online sessions (see column 1, lines 53-56).

With respect to claims 11 and 12, Applicant argues that Roth does not disclose URL requests identified at an ISP point of presence. The Examiner disagrees and submits that Roth discloses Internet protocol (IP) data including viewer URL's (see column 8, lines 20-28), stored in table 408 (see figure 4). Further, the URL request is identified at the ISP point of presence via the IP address.

With respect to claim 23, Applicant argues that the ISP in Roth does not profile web users and does not have the elements of the computer in claims 22. The computer in Roth indeed profiles users via their history data. Further, Bull discloses inferring users profiles via monitored websites.

With respect to claim 25, Applicant argues that Roth does not disclose the use of a sniffer. The Examiner submits Haitsuka et al (USPN 6,366,298), as seen above and in the previous rejection, as teaching a sniffer.

With respect to claim 19, the Examiner submits that nowhere in Roth does it indicate or even suggest that web sites must always be stored, as Applicant asserts. Contrarily, Roth discloses the database 16B updated to include new information, with some information stored on a temporary basis. As a result the combination of Roth and Eldering is indeed proper.

***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (703) 305-1867. The examiner can normally be reached on 9:30-6pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9326.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

  
adb

  
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